wherein the selector receives as inputs real and imaginary parts of an element of the channel estimate, and generates as outputs real and imaginary parts of a product of the element of the channel estimate and a corresponding element of the given symbol, without requiring a multiplication operation.

Please cancel claims 6 and 7.

6.
8. (Amended) The method of claim 1 wherein the selector comprises first and second switches and first and second add/subtract units, the first and second switches each selecting one of the real or the imaginary part of the element of the channel estimate for application to a corresponding one of the add/subtract units, such that the add/subtract units compute elements of real and imaginary parts of an inner vector product.

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12. (Amended) An apparatus for use in processing information in a receiver of a digital communication system, the apparatus comprising:

a signal processing circuit for processing a sequence of transmitted symbols, wherein the transmitted symbols correspond to points in a first modulation constellation, the first modulation constellation corresponds to a rotated version of a second modulation constellation, and each of the transmitted symbols represents a particular number of information bits;

wherein the signal processing circuit comprises at least one selector configured to compute a product of a channel estimate and a given one of the transmitted symbols; and

wherein the selector receives as inputs real and imaginary parts of an element of the channel estimate, and generates as outputs real and imaginary parts of a product of the element of the channel estimate and a corresponding element of the given symbol, without requiring a multiplication operation.

Please cancel claims 17 and 18.

19. (Amended) The apparatus of claim 12 wherein the selector comprises first and second switches and first and second add/subtract units, the first and second switches each selecting one of the real or the imaginary part of the element of the channel estimate for application to a corresponding one of the add/subtract units, such that the add/subtract units compute elements of real and imaginary parts of an inner vector product.

Please cancel claims 23 and 25.

24. (Amended) A method of processing information in a transmitter of a digital communication system, the method comprising the step of:

generating a sequence of transmitted symbols, wherein the transmitted symbols correspond to points in a first modulation constellation generated by applying a predetermined rotation to a second modulation constellation, and each of the transmitted symbols represents a particular number of information bits;

the transmitted symbols being configured such that a signal processing operation applied in a corresponding receiver of the system is implementable utilizing at least one selector configured to compute a product of a channel estimate and a given one of the transmitted symbols;

wherein the selector receives as inputs real and imaginary parts of an element of the channel estimate, and generates as outputs real and imaginary parts of a product of the element of the channel estimate and a corresponding element of the given symbol, without requiring a multiplication operation.